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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,785	09/08/2003	Charles D. Gollnick	14206US03	1344

7590 03/20/2007

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EXAMINER	
SOBUTKA, PHILIP	
ART UNIT	**PAPER NUMBER**
2618	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/657,785	GOLLNICK ET AL.	
	Examiner	Art Unit	
	Philip J. Sobutka	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *38-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *38-46,49,50 and 52-54* is/are rejected.

7)☒ Claim(s) *47,48 and 51* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/6/07; 10/11/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 39-43,46,49,53,54 are rejected under 35 U.S.C. 102(b) as being anticipated by Moore (US 4,964,121).

Consider claim 39. Moore teaches a node *(Moore's communication units and remote sites are nodes in a wireless network, see figure 1)* for use in a wireless network comprising:

a transceiver *(Moore, figures 1,3,5)*; and

a control *(Moore figure 5, items 206)* to operate the node in an active state and a low power state *(Moore see for example column 2, lines 44-67)*,

the node in a low power state waking in response to a timer interrupt to receive a broadcast packet to which the node synchronizes *(Moore see for example figures 5,6, item 216, columns 7, line 31 – column 8, lines 65);*

the node in an active state entering a low power state in response to at least a second timer signal *(Moore see for example abstract, figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*.

Consider claim 40. Moore teaches a node *(Moore's communication units are nodes in a wireless network, see figure 1)* for use in a wireless network comprising:

a transceiver *(Moore, figures 1,3,5)*; and

a control *(Moore figure 5, items 206)* to operate the node in an active state and a low power state *(Moore see for example column 2, lines 44-67)*,

the node in a low power state waking at a timed interval to receive a packet broadcast periodically in a broadcast packet time slot *(Moore see for example figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*,

the node being responsive to the broadcast packet to switch to the active state *(Moore see for example abstract, figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*.

As to claim 41, Moore as applied to claim 40 above teaches wherein the node switches from the active state to the low power state if the node does not receive a message within a predetermined period of time *(Moore see for example abstract, figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*

Consider claim 42. Moore teaches a method for operating a node in a wireless network *(Moore's communication units are nodes in a wireless network, see figure 1)* comprising:

waking a node in a low power state at regular intervals *(Moore see for example figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*;

receiving at a waken node a message broadcast periodically in a broadcast message time slot *(Moore see for example figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*;

synchronizing the node to a received broadcast message *(Moore also teaches synchronization, see for example columns 7, line 31 – column 8, lines 65)*; and switching the node to an active state in response to a received broadcast message *(Moore see for example figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*.

Consider claim 43. Moore teaches a method for operating a node in a wireless network comprising:

waking a node in a low power state at regular intervals *(Moore see for example figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*;

receiving at a waken node a message broadcast periodically in a broadcast message time slot *(Moore see for example figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*;

synchronizing the node to a received broadcast message *(Moore also teaches synchronization, see for example columns 7, line 31 – column 8, lines 65)*;

switching the node to an active state in response to a received broadcast message *(Moore see for example figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*; and

switching the node to the low power state if a message is not received in the active state for a predetermined period of time *(Moore see for example figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*.

As to claim 46, Moore teaches the method of claim 41, wherein expiration of the second timed interval is indicated by expiration of a timer set in accordance with a maximum time for which the node is to remain awake waiting for a message addressed

to the node *(Note that Moore's timer would indicate the maximum time for which the node is to remain awake. Moore see for example abstract, figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*.

As to claim 49, Moore teaches the method of claim 42, wherein the regular interval is a function of a period at which a particular type of message is broadcast *(Moore see for example column 2, lines 43-67, column 5, lines 25-65)*.

Consider claim 53. Moore teaches in a node having a transceiver for use in a wireless network *(Moore's communication units and remote sites are nodes in a wireless network, see figure 1)*, one or more circuits comprising:

a control to operate the node in an active state and a low power state, the node in a low power state waking in response to at least a first timer signal to receive a broadcast packet to which the node synchronizes *(Moore also teaches synchronization, see for example columns 7, line 31 – column 8, lines 65)*, the node in an active state entering a low power state in response to at least a second timer signal *(Moore see for example abstract, figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*.

Consider claim 54. Moore teaches, in a node having a transceiver for use in a wireless network *(Moore's communication units and remote sites are nodes in a wireless network, see figure 1)*,

one or more circuits comprising: a control to operate the node in an active state and a low power state, the node in a low power state waking at a timed interval to receive a packet broadcast periodically in a broadcast packet time slot, the node being

responsive to the broadcast packet to switch to the active state *(Moore see for example abstract, figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 38,44,45,50,52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Rypinski (US 5,440,560).

Consider claim 38. Moore teaches a node *(Moore's communication units and remote sites are nodes in a wireless network, see figure 1)* for use in a wireless network comprising:

a transceiver *(Moore, figures 1,3,5)*; and

a control *(Moore figure 5, items 206)* to operate the node in an active state with the transceiver on and a low power state with the transceiver off *(Moore see for example column 2, lines 44-67)*,

the node in the low power state switching to the active state at regular intervals to receive a broadcast message *(Moore see for example abstract, figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)* and the node synchronizing to the broadcast message *(Moore also teaches synchronization, see for example columns 7, line 31 – column 8, lines 65)*.

Moore lacks a teaching of the message being a polling message.

Rypinski, in a power saving wireless network, teaches that use of polling messages allows for non-contending opportunities to request service *(Rypinski see especially column 1, lines 53-64)*. It would have been obvious to one of ordinary skill in the art to modify Moore to have the message be a polling message in order to allow for non-contending opportunities to request service as taught by Rypinski.

Consider claim 44. Moore teaches a wireless network comprising:

a first node for periodically broadcasting a message *(Moore's communication units and remote sites are nodes in a wireless network, see figures 1)*;

a second node having an active state for receiving messages and a low power state *(Moore see for example column 2, lines 44-67)*,

the second node switching from the active state to the low power state if a message is not received in the active state for a predetermined period of time and the second node in a low power state waking at regular time intervals *(Moore see for*

example abstract, figures 5,6, item 216, columns 7, line 31 – column 8, lines 65) to receive a broadcast packet to which the second node synchronizes *(Moore also teaches synchronization, see for example columns 7, line 31 – column 8, lines 65)*.

Moore lacks a teaching of the message being a polling message.

Rypinski, in a power saving wireless network, teaches that use of polling messages allows for non-contending opportunities to request service *(Rypinski see especially column 1, lines 53-64)*. It would have been obvious to one of ordinary skill in the art to modify Moore to have the message be a polling message in order to allow for non-contending opportunities to request service as taught by Rypinski.

Consider claim 45. Moore teaches a method of operating nodes in a wireless network *(Moore's communication units and remote sites are nodes in a wireless network, see figures 1)* comprising:

operating a node in an active state *(Moore see for example column 2, lines 44-67)*;

switching the node from the active state to a low power state if a message is not received for a predetermined period of time in the active state *(Moore see for example abstract, figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*.

periodically broadcasting from another node a message *(Moore see for example abstract, figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*;

waking the node in the low power state at timed intervals to receive a broadcast message *(Moore see for example abstract, figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)*; and

synchronizing the wakened node to the received broadcast message *(Moore also teaches synchronization, see for example columns 7, line 31 – column 8, lines 65).*

Moore lacks a teaching of the message being a polling message.

Rypinski, in a power saving wireless network, teaches that use of polling messages allows for non-contending opportunities to request service *(Rypinski see especially column 1, lines 53-64).* It would have been obvious to one of ordinary skill in the art to modify Moore to have the message be a polling message in order to allow for non-contending opportunities to request service as taught by Rypinski.

Consider claim 50. Moore teaches the method as applied to claim 42 above, but lacks a teaching of wherein the regular interval is equal to a period at which a polling message is broadcast.

Rypinski, in a power saving wireless network, teaches that use of polling messages allows for non-contending opportunities to request service *(Rypinski see especially column 1, lines 53-64).* It would have been obvious to one of ordinary skill in the art to modify Moore to have the message be a polling message in order to allow for non-contending opportunities to request service as taught by Rypinski. Note that therefore the regular interval would be for the polling message

Consider claim 52. Moore teaches, in a node having a transceiver for use in a wireless network *(Moore's communication units and remote sites are nodes in a wireless network, see figures 1)*, one or more circuits comprising:

a control to operate the node in an active state with the transceiver on and a low power state with the transceiver off, the node in the low power state switching to the

active state at regular intervals to receive a message *(Moore see for example abstract, figures 5,6, item 216, columns 7, line 31 – column 8, lines 65)* and the node synchronizing to the message *(Moore also teaches synchronization, see for example columns 7, line 31 – column 8, lines 65)*.

Moore lacks a teaching of the message being a polling message.

Rypinski, in a power saving wireless network, teaches that use of polling messages allows for non-contending opportunities to request service *(Rypinski see especially column 1, lines 53-64)*. It would have been obvious to one of ordinary skill in the art to modify Moore to have the message be a polling message in order to allow for non-contending opportunities to request service as taught by Rypinski.

Allowable Subject Matter

6. Claims 47,48, and 51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Consider claim 47. The nearest prior art as shown in Moore fails to teach the method of claim 41, wherein if the node receives a message within the second timed interval, the node remains in the active state for at least a third timed interval different from the second timed interval.

Consider claim 48. The nearest prior art as shown in Moore fails to teach the method of claim 41, wherein if the node receives a message that is not addressed to the node within the second timed interval, the node remains in the active state for at least a third timed interval different from the second timed interval.

Consider claim 51. The nearest prior art as shown in Moore fails to teach the method of claim 42, wherein the regular interval is a multiple of a period at which a polling message is broadcast.

Response to Amendment

7. Applicant's arguments with respect to claims 38-54 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Sobutka whose telephone number is 571-272-7887. The examiner can normally be reached Monday through Friday from Monday - Friday, 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-41774711.

9. The central fax phone number for the Office is 571-273-8300.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number.

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3/15/07

PHILIP J. SOBUTKA
PATENT EXAMINER

Philip J Sobutka

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